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AUTHOR Sedlacek, William E.
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ABSTRACT

This document divides a cluster of medical schools into seven groups based on percent change in entering class size from 1970-71 to 1973-74. These groups were then used to analyze differences between schools of differing class-size change patterns for 307 varibales drawn from the Institutional Profile System of the Association of American Medical Colleges. The results indicated significant differences for 36 of the 307 variables analyzed. Schools that increased class size the most and least had much in common. They tended to be newer, smaller schools, employing more volunteer faculty. However, the schools that changed the least were slightly older than the schools increasing rapidly and the differences between the two seemed to be financial. The schools that changed the least tended to provide less student aid and have relatively fewer research funds. (Author/KE)

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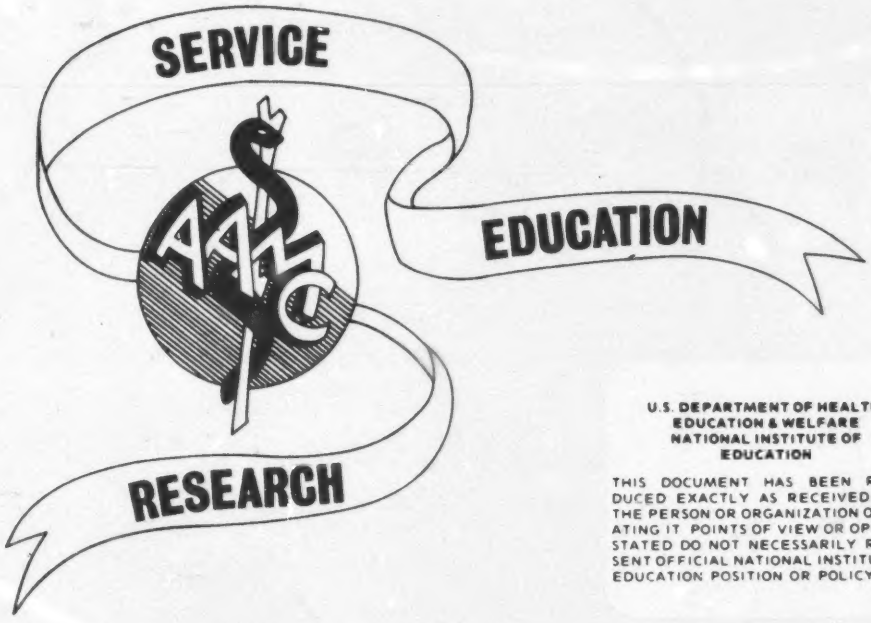
VARIABLES RELATED TO INCREASES IN MEDICAL SCHOOL CLASS SIZE



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PREPARED BY:

WILLIAM E. SEDLACEK

ASSOCIATION OF AMERICAN MEDICAL COLLEGES
DIVISION OF OPERATIONAL STUDIES
ONE DUPONT CIRCLE, N.W.
WASHINGTON, D.C. 20036

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Executive Summary

The report describes a clustering of medical schools into seven groups based on percent change in entering class size from 1970-71 to 1973-74. These seven groups were then used to analyze differences between schools of differing class size change patterns for 307 variables drawn from the Institutional Profile System of the Association of Americal Medical Colleges.

The results indicated significant differences for 36 of the 307 variables analyzed. Schools that increased class size the most and least had much in common. They tended to be newer, smaller schools, employing more volunteer faculty. However the schools that changed the least were slightly older than the schools increasing rapidly and the differences between the two seemed to be financial.

The schools that changed the least tended to provide less student aid and have relatively fewer research funds. Another financial finding is that schools which have increased their enrollment the most have tended to pay higher salaries to basic science faculty than other schools. The report discusses the possibility of direct funding for student aid and faculty salaries.

The variables which were not related to changes in class size included percentage of minority students and MCAT scores. Increases in women students may be related to class size increases but further study is needed before any conclusions are possible.

VARIABLES RELATED

TO

INCREASE IN MEDICAL SCHOOL CLASS SIZE

William E. Sedlacek

October 31, 1975

Variables Related to Increase
In Medical School Class Size

The topic of optimal class size appears to have long intrigued educators; most often as a topic for conjecture and speculation and less often as a topic for research.

I. Review of Literature

Higher Education - General

The term "class size" generally refers to the size of instructional groups in the classroom in most studies in higher education. Research on class size in higher education, and for that matter, elementary and secondary as well, has rarely indicated any relationship between class size and educational outcomes. Extensive reviews of the literature by Hatch and Bennet (1960), Dressel et al (1961), McKeachie (1963), Lindbloom (1970), Templeton (1972) and Schofield (1974) provide overwhelming evidence that immediate or long term retention of knowledge is not influenced by class size. The only two studies found which show any contrary evidence are one by Macomber and Siegel (1960) who reported that students in small classes had a greater ability to make valid conclusions and interpretations and one by Simmons (1959) who found greater achievement in college algebra classes for smaller groups. Despite the consistency of the research results, most students and faculty continue to believe that teaching is more effective in small classes (e.g., Hatch and Bennet 1960; Macomber and Siegel 1960; Dressel et al 1961; Bosley, 1962; Eash and Bennett, 1964; and DeCecco, 1964).

In medical school, "class size" generally refers to the total number of students enrolled in a given year of the curriculum because the entire class is typically treated as a single instructional unit. Therefore, it may be appropriate to review studies on the relationships between total enrollments in colleges and universities and other variables of interest. Here again, the research results may run contrary to our expectations. Studies have shown that the larger the enrollment the greater the Ph.D. output (Thistlewaite, 1959), and the greater the percentage of faculty that held the Ph.D. (Astin 1962). Size of enrollment has generally not been found related to intellectualism of students (Astin, 1965), scholarship funds per student, percentage of National Merit scholars, faculty-student ratio (Astin, 1962), or quality of graduate education (Cartter, 1966).

There does appear to be good evidence that there is less personal contact between faculty and students at large schools than at small schools (Dressel et al, 1961; McKeachie, 1963; Orlans, 1962; and Astin, 1963, 1965). However, in studies using conventional educational criteria, such as student achievement or faculty productivity measures, there is no evidence that size of enrollment makes any difference, and in fact, on some dimensions large schools appear superior to small ones.

Medical Schools

Sanazaro (1966) did an extensive survey of the literature on class size (number in a yearly class) in medical schools

he analyzed existing data and concluded that class size was unrelated to the typical criteria used in evaluating medical education. Sanazaro used data from the Association of American Medical Colleges (AAMC) longitudinal study (Hutchins, 1964) and other sources and found no relationship between class size and the following variables: Medical College Admission Test (MCAT) scores, total school expenditures, attrition (see Johnson and Hutchins, 1966), career choice, medical school environment (see Hutchins, 1964), percentage of graduates serving as full time faculty. Sanazaro (1966), however, did find that schools with larger classes tend to: spend less money per medical student, score higher on Part I of the National Board examinations (see Sedlacek and Hutchins, 1966), and have less "general esteem" (see Hutchins, 1962) than smaller schools.

II. The Present Study

Recent Federal legislation has dealt directly with medical school class size. The Health Manpower Training Act of 1971 provided U.S. medical schools with capitation grants which required expanding first year enrollment in the 1972-73 school year by 10 students or 5% (whichever is larger) over the 1970-71 school year. Various other provisions of the Health Manpower Training Act of 1971 deal with increases in medical school class size.

It appears that a study of the changes in the medical schools associated with the changes in class size would be

particularly appropriate. Thus, the purpose of this study was to examine the relationship between increases in entering class size in U.S. medical schools and the concomitant changes on a variety of educational variables.

III. Method

Data were obtained from the AAMC Institutional Profile System (IPS). Because of completeness and accuracy of data and dates of legislation, changes in entering class size between 1970-71 and 1973-74 became the basic units of analysis. Where available, changes through 1974-75 were also examined.

Clustering Schools on Change

Data were available on 105 U.S. medical schools which had entering classes in 1970-71 and 1973-74. A series of analyses employing clustering and scaling methods were conducted to determine the optimal number of groups of schools for further analyses.

Using % change in entering class size from 1970-71 to 1973-74 as the criterion, empirical cluster analyses[1] were conducted to determine how to group schools for further study. Results were obtained for solutions ranging from 3 to 12 groups of schools. It was determined that the solution for 7 groups, varying in size from 7 to 24 schools each, provided the most

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[1] Procedure minimizing error variance between clusters

meaningful clustering of schools. Means and standard deviations for each of the 7 groups of schools are given in Table 1. Table 1 shows that the mean % change for each group varied from less than 1% to more than 100%. Appendix A lists the schools in each of the seven groups.

Variables Analyzed

More than three hundred variables from the IPS (see Appendix B) were analyzed for the 7 groups using analysis of variance with Student-Newman-Keuls post hoc tests, and Chi square at the .05 level. The study was considered exploratory in nature and included a wide variety of variables. Unless otherwise noted, variables are for the 1973-74 school year.

IV. Results and Discussion

Of the 307 analyses of variance or Chi square analyses conducted, 36 achieved significance at the .05 level. Twenty-six of the 33 significant analyses of variance were also significant (.05 level) on the Student-Newman-Keuls post hoc test. Three Chi square analyses achieved significance at .05. According to calculations derived from Brozek and Tiede (1952) the probability of finding 36 significant results at the .05 level out of 307 tests due to chance alone is .08.

Non Significant Results On Variables of Interest

Analyses of some variables are interesting in that they were not associated with changes in class size. For instance, increases in class size were not related to Medical College Admission Test (MCAT) scores, premedical grades, or ethnic composition of students. Thus, the quality of the entering pool as measured by MCAT and premedical grades, appeared not to be associated with changes in class size. Additional, schools which increased more than others did not appear to have done so by adding differentially large numbers of minority students.

Other relevant variables which did not show significance were geographical location, number and percent of foreign medical students, and many curriculum variables such as types of electives or innovative courses offered. It should be added, however, that the curriculum variables contained some partial information and should be further explored before any definitive conclusions are reached.

Significant Results

In an effort to provide some structure to the results, they will be presented and discussed according to the results of factor analyses by Keeler et al (1972), Sherman (1975) and Nunn (1975) on variables similar to those included in this study. By employing the factors developed in other studies we can provide a conceptual framework to help interpret the results of the present study.

Factor I - Undergraduate Medical Educational Programs

Table 2 shows that the schools that changed the least (Group 1) and the most (Group 7) tend to be the newest schools. This point should be kept in mind, for in many analyses of other variables, Groups 1 and 7 will appear most alike. For instance, in Table 2, Groups 1 and 7, as compared to the other schools, tend to enroll fewer M.D. students and have more university hospital beds per M.D. student.

On variables where Groups 1 and 7 do not appear similar, often either Group 1 or 7 individually appear different from the others. For instance Group 1 (lowest increase in class size) schools tend to: have a greater % of first year M.D. students with degrees other than bachelors, masters and doctorates, have a smaller % of third and fourth year M.D. students who requested aid receiving it, have a smaller average amount of aid for third year M.D. students, have fewer third and fourth year M.D. students who need aid that receive it.

Group 7 (most increase in class size) schools as compared to the others tend to: have more projected future growth, have fewer students receiving loans and larger library budgets.

In summary, on the variables on Factor I, we find that the newer schools which are smaller have either increased class size a great deal or very little. The new schools which show almost no class size increase are slightly older than those that changed

a great deal and are perhaps caught in the developmental period after their initial rapid enrollment increase. Perhaps they cannot provide sufficient aid to students and have not yet developed large endowments so they are trying to stabilize their situation, although the nature of the data from this study do not provide any direct evidence of this.

Factor-II Reliance on Non-Full Time Faculty

Table 3 shows that the schools that changed the most (Group 7) and those that changed the least (Group 1) tend to utilize relatively more volunteer clinical faculty than schools in the other groups. While not significant with a post hoc test, the same pattern is true for volunteer basic science faculty.

Compared to the other schools, Group 1 schools tended to: have relatively fewer full-time faculty per MD student, and have higher salaries for basic science faculty and anesthesiologists.

Schools that increased class size the most (Group 7), tended to have fewer total full time faculty and have a greater percentage of budgeted clinical faculty vacancies. We cannot easily relate faculty variables to changes in class size.

One might expect newer schools to rely more on volunteer faculty and higher salaries to attract full time faculty; Therefore the newness of the schools seems to best "explain"

the findings on this factor. Additionally,before we assume that reliance on volunteer faculty is undesireable, it could be that the newer schools tend to be more community oriented than their older counterparts. Newer programs in family medicine, public health and community medicine may require more participation from local professionals.

Factor III-Type of Control (Public-Private)

Table 4 shows that Groups 1 (least increase) and 7 (most increase) tend to have less total unrestricted revenue from student tuitions and fees, smaller revenues from all sources, and smaller unrestricted expenditures than the other schools, although only the student tuition and fees variable was significant on the post hoc test.

Compared to the other groups, Group 1 (increased least) tended to have relatively less revenue from federal sources and to have less total restricted professional MD fees.

The type of control variables appear to be related more to school size than to a public-private dimension. When tested directly,control type was not significantly related to increases in class size.

Factor IV-Federal Research Involvement

Table 5 shows that even though the post hoc differences were not significant,Groups 1 (least increase) and 7 (most increase) tended to have lower federal sponsored program

revenues, and lower NIH research grants than the other schools. Group 1 had a lower percentage of total sponsored research from federal sources than the other schools.

Clearly, newer, smaller schools would tend to have smaller absolute totals concerning federal research. However, it is notable that schools with a small percent of their sponsored research budgets from federal funds have tended not to increase their class sizes.

Factor V-Graduate Program Variables

Table 6 shows that the schools that increased their class size the most (Group 7) have fewer total residents instructed by MD faculty than other schools. Schools that have changed the least (Group 1) tend to have a smaller percentage of male MD graduates than other schools.

The first variable discussed is related to school size and graduate program development and is not surprising. That schools that have not increased in class size should graduate relatively fewer males is not expected. One may have hypothesized that schools seeking to increase enrollment have admitted more females. The opposite appears to be true although many other variables related to student sex were studied and not found significant. This finding should be explored further.

Factor VI-Non MD Educational Programs

Table 7 shows that even though no post hoc tests were

significant, Groups 7 and 1 (most and least increase) had fewer graduate students than the other schools. This finding would be expected of newer, smaller schools.

Chi Square Tests

The three significant Chi square tests involve curriculum variables and are relatively difficult to interpret. Schools that have increased most and least on class size (Groups 7 and 1) tend not to have training programs for physician assistants. Also, schools that change less (Group 1) tend to use computer assisted instruction and schools that change more (Group 7) tend to conduct formal reviews of the career choices of their graduates.

V. Limitations

While some cautionary statements have been made in the previous sections of this report, several additional points should be made.

The study is exploratory and involved the scanning of large numbers of variables to determine significance. The risk in doing this is to increase the probability that we will find significant results due to chance (Type 1 error). That we have an 8% chance of making a Type 1 error was noted earlier. Since this is an exploratory study, we are willing to assume

this risk of a higher Type 1 error, but we should be aware of it.

In order to provide some way of detecting chance findings, the results of this study were discussed around previously determined factors. Thus, results that do not as easily fit into these factors may be more likely to be spurious findings.

Another limitation to this study is that we cannot make cause-effect statements. There are a great many uncontrolled societal and educational variables which could have affected the results of this study, and preclude our ability to determine what was the result of an increase in class size.

However, what we can do is to generate ideas and hypotheses which are subject to verification in future studies. This is all we can ask of an exploratory study such as this.

Other methodological problems which should cause us to be cautious in interpreting results are the large, often hetereogeneous (between groups) standard deviations, and the small and varying group sizes. In many cases we have violated the assumptions of Analysis of Variance.

Originally, the writer intended to investigate the relationship of class size in 1970 to the 307 variables in this study. Since school size was such an obvious confounding variable, nearly all results were significant and reporting of these results was considered meaningless.

A final caution relates to the complexity of the results. There is great temptation to overinterpret the results of such a

study. By limiting oneself to more general trends and conclusions it is easier to avoid the spurious and irrelevant. These general conclusions should be studied further before the more molecular findings are pursued.

Overall Summary and Conclusions

Schools that increased class size the most and least had much in common. They tended to be newer, smaller schools, employing more volunteer faculty. However, the schools that changed the least were slightly older than the schools increasing rapidly and the differences between the two seemed to be financial.

The schools that changed the least tended to provide less student aid and have relatively fewer federal research funds. Perhaps more direct research funding of particular schools or direct aid to students at those schools are policies worth further investigation. Another financial finding is that schools which have increased their enrollment the most have tended to pay higher salaries to basic science faculty than other schools. Again, direct funding of faculty salaries should be investigated as a way of providing federal support for medical education.

The variables that were not related to class size change should help eliminate some common myths. Schools which increased class size were clearly not doing so with minority students or low MCAT students since neither variable was related to class size. Increases in women students may be related to class size increases,

but further study is needed before any conclusions are possible. The reader is reminded that class size increases were unrelated to nearly 90% of the variables studied.

It is recommended that additional research on the topic of class size focus on the refinement and control of key variables from this study and the use of correlational type statistics, such as multiple regression and multiple discriminant analysis. However, since results may be curvilinear the Eta statistic may also be appropriate. (See Guilford and Fruchter, 1973).

TABLE 1

Means and Standard Deviations for Groups of
Medical Schools on % Class Size Increase (1970-71 to 1973-74)

Group	N	Mean (%)	S.D.
1	9	0.61	0.93
2	16	8.04	1.49
3	24	12.77	2.28
4	17	21.33	2.22
5	17	27.97	1.89
6	15	42.30	10.42
7	7	126.37	34.34

TABLE 2

Means and Standard Deviations For Groups of Medical Schools On Undergraduate Program Variables

Group	N	Year Founded		Ratio-Univ. Hosp. Beds To M.D. Students	
		Mean	S.D.	Mean	S.D.
1	9	1945.67	41.52	24.74	24.29
2	16	1877.00	46.50	6.50	3.40
3	24	1882.04	49.15	7.50	3.19
4	17	1886.76	42.56	6.79	4.51
5	17	1894.00	50.36	9.24	3.98
6	15	1914.20	47.86	9.48	5.10
7	7	1965.71	2.83	19.72	6.32
Student-Newman-Keuls Comparisons Significant at .05		1 vs. 2,3,4,5 7 vs. 2,3,4,5,6		1 and 7 vs. 2,3,4,5,6	

TABLE 2 (continued)

Group	N	Total M.D. Students 73-74		Proj. Enroll. % Growth Students 74-76		% Other Degree 1st Year M.D. Students		% 3rd Year M.D. Students Rec. Aid Req.	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
1	9	299.67	370.41	5.99	17.02	2.56	3.16	27.03	40.81
2	16	577.69	165.32	11.53	21.97	0.14	0.40	89.06	48.65
3	24	433.08	102.86	12.42	19.02	0.33	0.84	86.35	12.59
4	17	458.88	240.13	6.43	20.98	0.29	0.63	79.87	32.37
5	17	440.53	191.35	14.22	9.51	1.25	2.76	82.03	25.10
6	15	420.40	149.08	11.95	16.39	0.96	1.99	88.31	9.27
7	7	160.29	85.14	26.76	27.26	0.49	0.93	72.33	36.16
Student-Newman-Keuls Comparisons Significant at .05		1 vs. 2 7 vs. 2,3,4,5,6		7 vs. 1,2,3,4		1 vs. 2,3,4		1 vs. 2,3,4,5,6,7	

TABLE 2 (continued)

Group	N	% 4th Year M.D. Student Rec. Aid Req.		Av. Amt. Aid 3rd Year M.D. Students		% 3rd Year M.D. Students Need Rec. Aid		% 4th Year M.D. Students Need Rec. Aid	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
1	9	51.30	40.36	909.53	1426.69	29.70	44.83	59.00	46.25
2	16	93.55	39.61	2190.55	943.55	96.30	50.21	99.81	41.18
3	24	86.07	13.07	2845.40	1040.99	91.95	10.92	91.72	13.12
4	17	71.89	37.55	2079.56	1055.14	85.57	36.25	78.06	39.80
5	17	87.33	19.79	2321.47	912.56	84.66	25.46	91.05	20.44
6	15	80.09	22.45	2237.92	737.32	95.32	8.82	94.90	8.26
7	7	76.44	37.28	1942.18	1210.66	80.22	36.01	85.27	38.10
Student-Newman-Keuls Comparisons Significant at .05		1 vs. 2,3,5		1 vs. 2,3,4,5, 6,7		1 vs. 2,3,4,5, 6,7		1 vs. 2	

TABLE 2 (continued)

Group	N	Total M.D. Student Rec. Loans		Med. Coll. Libr. Bud. Books and Periodicals (thous.)	
		Mean	S.D.	Mean	S.D.
1	9	40.56	61.66	117.32	64.81
2	16	91.87	74.46	116.98	37.83
3	24	50.22	43.07	134.23	51.10
4	17	70.88	55.22	105.16	43.48
5	17	79.25	56.91	129.18	68.87
6	15	62.33	45.19	111.74	34.44
7	7	7.57	8.38	177.32	35.77
Student-Newman-Keuls Comparisons Significant at .05		7 vs. 2, 5		7 vs. 4	

TABLE 3

Means and Standard Deviations For Groups of Medical Schools on Reliance on Non-Full Time Faculty Variables

Group	N	FT Fac.-Total All Depts, 73-74		Ratio FT Fac. To M.D. Student		Ratio Vol. to FT Bas.Sc. Fac.		Ratio Vol. to FT Clin.Fac.		% Bud. Vac. Clin.Fac.	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
1	9	226.78	202.10	1.17	0.99	0.67	0.74	8.20	7.91	14.72	19.78
2	16	334.88	168.79	2.17	1.19	0.63	0.35	4.68	3.19	6.94	5.39
3	24	341.67	146.85	1.48	0.64	0.30	0.30	2.29	2.87	6.08	4.96
4	17	278.12	80.09	1.92	0.73	0.36	0.34	2.44	1.84	7.21	6.63
5	17	312.12	175.61	1.65	0.64	0.51	0.38	3.99	3.74	4.97	4.35
6	15	366.93	217.82	1.38	0.55	0.35	0.26	2.18	1.49	5.80	4.65
7	7	124.14	48.39	1.27	0.28	0.58	0.25	7.30	6.12	24.94	15.58
Student-Newman-Keuls Comparisons Significant at .05		7 vs. 3,6		1 vs. 2		None		1 vs. 3,4,6 7 vs. 3,4,5,6		7 vs. 1,2,3,4,5,6	

TABLE 3 (continued)

Group	N	Av. Tot. Sal Prof. Bas. Sci. 74-75 (thous.)		Av. Tot. Sal. Assoc. Prof. Bas. Sci. 74-75 (thous.)		Av. Tot. Sal. Asst. Prof. Bas. Sci. 74-75 (thous.)		Av. Tot. Sal Assoc. Prof. Anesth 74-75 (thous.)	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
1	9	33.60	6.55	26.24	5.43	20.59	3.78	58.29	4.30
2	16	29.31	3.83	22.88	2.23	18.22	1.36	47.82	5.44
3	24	30.02	3.68	23.72	2.56	18.67	1.56	41.95	6.08
4	17	27.56	3.15	22.39	1.67	17.82	1.21	46.63	3.64
5	17	27.47	2.11	21.52	1.63	17.27	1.28	44.36	5.03
6	15	31.12	4.13	23.60	3.03	18.95	1.70	38.25	8.82
7	7	29.07	2.36	23.77	2.90	19.39	1.63	43.50	3.54
Student-Newman-Keuls Comparisons Significant at .05		1 vs. 4, 5		1 vs. 4, 5		1 vs. 2, 3, 4, 5		1 vs. 3, 6	

TABLE 4

Means and Standard Deviations For Groups of Medical Schools on Type of Control (Public-Private) Variables

Group	N	Medical College Revenue-Total All Sources (thous.) Mean	S.D.	% Medical College Revenue from Federal Sources (thous.) Mean	S.D.	Medical College Rev. Tot. Restric. Profess. Fees-MD (thous.) Mean	S.D.	Med. Coll. Rev. Tot. Unrestric. Stud. Tuition and Fees (thous.) Mean	S.D.
1	9	11,292.21	14,156.48	27.69	15.76	103.58	171.84	462.56	682.96
2	16	23,747.60	12,753.59	48.61	14.67	1751.90	1568.72	1288.32	601.95
3	24	24,277.84	14,614.81	50.64	15.43	2311.33	2011.23	910.08	526.25
4	17	18,962.08	13,072.83	48.62	17.21	938.42	1562.23	1002.44	660.20
5	17	19,440.55	11,714.18	49.50	16.77	1298.73	2212.89	885.42	692.51
6	15	25,404.28	15,433.96	50.83	16.43	1524.53	1488.57	643.38	540.31
7	7	8,584.67	6,073.29	32.86	18.02	261.99	605.40	278.65	301.68
Student-Newman Keuls Comparisons Significant at .05		none		1 vs 2,3,4,5,6		1 vs 3		2 vs 1,6,7	

TABLE 4 (continued)

Group	N	Medical College Expend. Tot. Unrestric. (thous.) Mean	S.D.	% of Total Unrestric. Medical College Expen-Admin & Gen. (thous.) Mean	S.D.
1	9	11,432.29	14,649.84	15.37	9.28
2	16	23,958.10	13,573.35	9.57	5.12
3	24	24,278.98	14,195.20	8.30	4.84
4	17	19,754.58	13,421.86	9.10	4.80
5	17	19,439.96	11,653.58	9.49	3.83
6	15	25,648.24	16,727.83	8.16	4.32
7	7	8,005.64	6,253.57	15.50	9.17
Student-Newman Keuls Comparisons Significant at .05		none		none	

TABLE 5

Means and Standard Deviations For Groups of Medical Schools on Federal Research Involvement Variables

Group	N	Tot. Rev. Fed. Spons. Prog. (thous.) Mean	Tot. Rev. Fed. Spons. Prog. (thous.) S.D.	% of Tot. Spons. Res. From Fed. Mean	% of Tot. Spons. Res. From Fed. S.D.	NIH Res. Grants 73-74 (thousand millions) Mean	NIH Res. Grants 73-74 (thousand millions) S.D.
1	9	3,673.47	5,285.23	54.01	37.25	1.30	1.75
2	16	10,772.52	7,316.74	80.39	10.76	3.72	3.07
3	24	11,756.71	8,874.98	80.05	9.95	3.88	3.08
4	17	8,175.66	6,183.42	79.58	8.62	2.14	1.82
5	17	9,120.58	7,421.03	76.29	22.05	2.56	2.09
6	15	10,981.86	6,143.55	80.57	10.13	3.09	2.26
7	7	2,611.37	2,097.81	84.26	6.58	1.31	0.56
Student-Newman Keuls Comparisons Significant at .05		none		1 vs 2,3,4,5,6,7		none	

TABLE 6

Means and Standard Deviations for Groups of Medical Schools on Graduate Program Variables

		Tot. Residents Instruc. By M.D. Fac. 73-74		% Male M.D. Graduates 73-74	
Group	N	Mean	S.D.	Mean	S.D.
1	9	196.44	220.27	56.81	43.24
2	16	426.69	298.39	89.84	2.01
3	24	293.36	213.67	89.93	4.65
4	17	189.69	136.11	78.47	29.92
5	17	281.76	183.28	79.60	25.94
6	15	262.13	139.08	87.99	5.56
7	7	126.00	70.69	77.30	34.47
Student-Newman-Keuls Comparisons Significant at .05		2 vs. 4, 7		1 vs. 2,3,6	

TABLE 7

Means and Standard Deviations for Groups of Medical Schools on Non-M.D. Educational Program Variables

		Total Grad Students (Masters and Doctoral Candidates)	
Group	N	Mean	S.D.
1	9	52.89	71.17
2	16	134.81	115.18
3	24	116.09	83.37
4	17	79.18	53.84
5	17	139.65	99.02
6	15	95.80	77.46
7	7	42.57	46.80
Student-Newman-Keuls Comparisons Significant at .05		None	

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APPENDIX A

SCHOOLS IN EACH OF THE % CHANGE GROUPS

GROUP 1

East Virginia
Louisiana New Orleans
Mayo
Michigan
Minnesota Duluth
Ohio
Rush
SUNY Stoney Brook
Texas Tech

GROUP 2

California Irvine
California San Francisco
Colorado
Duke
Jefferson
Louisville
Loyola
MC of Wisconsin
Minnesota Minneapolis
Northwestern
Oklahoma
Pennsylvania
Pittsburgh
St. Louis
SUNY Downstate
Tennessee

GROUP 3

Arkansas
California Los Angeles
Chicago Medical
University of Chicago
Cincinnati
Cornell
Emory
Howard
Johns-Hopkins
MC of Virginia
Miami
Maryland
Missouri Columbia
Texas San Antonio
Stanford
SUNY Buffalo
SUNY Upstate
Temple
Vanderbilt
Vermont

GROUP 3 (continued)

Rutgers
Washington University St. Louis
West Virginia
Yale

GROUP 4

Bowman Gray
Creighton
Dartmouth
Georgetown
Georgia
Indiana
Kentucky
Nebraska
New York Medical
New York University
North Dakota
Oregon
Pennsylvania State
Rochester
South Dakota
Texas Galveston
Tufts

GROUP 5

Case Western Reserve
California San Diego
George Washington
Hahnemann
Hawaii
Illinois
Iowa
Kansas
Loma Linda
Louisiana Shreveport
Mississippi
North Carolina
MC of Pennsylvania
Puerto Rico
Southern California
University of Virginia
University of Washington Seattle

GROUP 6

Albany
Arizona
Baylor

GROUP 6 (continued)

Boston
Einstein
Florida
Meharny
Mt. Sinai
New Jersey
New Mexico
South Carolina
Texas Southwest
Utah
Wayne State
University of Wisconsin

GROUP 7

Brown
California Davis
Connecticut
Massachusetts
MC of Ohio Toledo
Michigan State
Texas Houston

APPENDIX B

LIST OF VARIABLES INCLUDED IN THE CLASS SIZE STUDY

INSTITUTION

*** GENERAL CHARACTERISTICS ***

V1000	MC-IDENTIFICATION CODE
V1010	STATE MC LOCATED
V1020	REGION MC LOCATED
V1030	CONTROL TYPE
V1040	YEAR FOUNDED
V1045	AGE OF INSTITUTION
V1050	2 OR 4 YR SCH
V1060	ACCREDITATION
V1070	MC TYPE & HOSPITAL
V1071	UNIV AFFIL HOSPITAL
V1072	UNIV OR ANY AFFIL HOSPITAL
V1080	TOT BEDS AFFIL HOSPITAL
V1085	RATIO AFFIL HOSP BEDS TO MD STUDENTS
V1090	NUMBER OF DEANS APPNTD 60-74

*** DEMOGRAPHIC ***

V1100	MC LOCATION-SMSA POP 71
V1110	MC LOCATION-IMMEDIATE LOCATION POP 71
V1120	MC LOCATION-IMMEDIATE LOCATION POP-DENSITY 71
V1130	MC LOCATION-SMSA POP-PCT NON-WHITE
V1140	SMSA POP PER MD STUDENT

*** LIBRARY ***

V1200	MC LIBRARIES-TOT VOL
V1210	MC LIBRARIES-ACQUISITIONS
V1220	MC LIBRARIES-TOT SERIAL TITLES RECVD

FINANCES (ACADEMIC YR 72-73)

*** REVENUES ***

--TOTALS BY SOURCE--

V2000	MC REV-TOT ALL SOURCES
V2010	MC REV-TOT FED SOURCES
V2015	PCT OF MC REV FROM FED SOURCES

--TOTALS BY SOURCE (UNRESTR)--

V2100	MC REV-TOT UNRESTR PROFESSIONAL FEES,MD SERV PLANS
V2110	MC REV-TOT UNRESTR ENDOW & GIFTS
V2115	PCT OF TOT MC REV FROM UNRESTR ENDOW & GIFTS

V2120	MC REV-TOT UNRESTR STUDENT TUITION & FEES
V2125	PCT OF TOT MC REV FROM UNRESTR STUDENT TUITION & FEES
V2130	MC REV-TOT UNRESTR FED, ST, LOC SOURCES
V2140	MC REV-TOT UNRESTR GIFTS BUSINESS & INDUS
V2145	PCT OF TOT MC REV FROM UNRESTR GIFTS BUSINESS & INDUS
V2150	MC REV-TOT UNRESTR GIFTS FOUNDATION
V2155	PCT OF TOT MC REV FROM UNRESTR GIFTS FOUNDATIONS
V2160	MC REV-TOT UNRESTR GIFTS ALUMNI
V2165	PCT OF TOT REV FROM UNRESTR GIFTS ALUMNI
V2170	MC REV-TOT GIFTS

--RECOVERY OF INDIRECT COSTS OF SPONS PROGS--

V2200	MC REV-TOT INDIRECT COSTS RECOVERY
V2210	MC REV-INDIRECT COSTS RECOVERY NON-GOVT
V2220	MC REV-INDIRECT COSTS RECOVERY FED PROG

--SPONSORED TOTALS BY SOURCE--

V2300	MC REV-TOT FED SPONS PROG
V2310	MC REV-TOT MULTI & SERV SPONS PROG

--SPONSORED RESEARCH BY SOURCE--

V2400	MC REV-TOT SPONS RESRCH
V2405	PCT OF TOT MC REV FOR SPONS RESRCH
V2410	MC REV-TOT FED SPONS RESRCH
V2415	PCT OF TOT SPONS RESRCH FROM FED
V2420	MC REV-TOT ST, LOC SPONS RESRCH
V2425	PCT OF TOT SPONS RESRCH FROM ST,LOC
V2430	MC REV-TOT NON-GOVT SPONS RESRCH
V2435	PCT OF TOT SPONS RESRCH FROM NON-GOVT

--SPONSORED TCH-TRN BY SOURCE--

V2500	MC REV-TOT SPONS TCH-TRN
V2505	PCT OF TOT MC REV FROM SPONS TCH-TRN
V2510	MC REV-TOT FED SPONS TCH-TRN
V2515	PCT OF TOT SPONS TCH-TRN FROM FED
V2520	MC REV-TOT ST,LOC SPONS TCH-TRN
V2525	PCT OF TOT SPONS TCH-TRN FROM ST,LOC
V2530	MC REV-TOT NON-GOVT SPONS TCH-TRN
V2535	PCT OF TOT SPONS TCH-TRN FROM NON-GOVT

-- *** EXPENDITURES ***

--TOTALS BY FUNCTIONAL CATEGORY (UNRESTR)--

V2600	MC EXPD-TOT UNRESTR
V2610	MC EXPD-TOT UNRESTR ADMN & GEN
V2615	PCT OF TOT UNRESTR MC EXPD FOR ADMN & GEN
V2620	MC EXPD-TOT UNRESTR ACADM SALARY, FEES TOT ACTUAL

V2625	PCT OF TOT UNRESTR MC EXPD FOR ACADM SALARY,FEES
V2630	MC EXPD-TOT UNRESTR INSTR & DEPT RESRCH
V2635	PCT OF TOT UNRESTR MC EXPD FOR INSTR & DEPT RESRCH
V2640	MC EXPD-TOT UNRESTR PUBLIC SERV

--EXPENDITURES PER STUDENT & STAFF--

V2700	INSTR & DEPT RESRCH EXPD PER STUDENT
V2710	INSTR & DEPT RESRCH EXPD PER FAC
V2720	MC EXPD-TOT UNRESTR PER MD STUDENT
V2730	MC EXPD-TOT UNRESTR PER FT FAC
V2740	SPECIAL PROJ $ PER MD STUDENT 72-73
V2750	TOT MC EXPD PER TOTAL STUDENTS

--SPONSORED EXPENDITURES--

V2800	MC EXPD-TOT SPONS RESRCH
V2805	PCT OF TOT MC EXPD FOR SPONS RESRCH
V2810	MC EXPD-TOT SPONS TCH-TRN
V2815	PCT OF TOT MC EXPD FOR SPONS TCH-TRN
V2820	PCT SPONS FAC SALARY FROM FED $ 72-73
V2830	MC EXPD-PCT SPONS PROG EXPD OF TOT
V2840	MC EXPD-TOT SPONS PROGS--ALL TYPES

*** NIH AWARDS ***

V2900	NIH AWARDS-PROG+PROJ & CENTER GRTS $1000
V2910	NIH AWARDS-RESRCH GRTS $1000 67-68
V2920	NIH AWARDS-RESRCH GRTS $1000 68-69
V2930	NIH AWARDS-RESRCH GRTS $1000 72-73
V2940	NIH AWARDS-RESRCH GRTS $1000 73-74
V2950	NIH AWARDS PCT CHANGE

*** CONSTRUCTION ***

--FUNDS BY SOURCE--

V3000	CONSTR FUNDS-TOT FED
V3005	PCT OF TOT CONSTR FUNDS FROM FED
V3010	CONSTR FUNDS-TOT ST
V3015	PCT OF TOT CONSTR FUNDS FROM ST
V3020	CONSTR FUNDS-TOT PRIV GIFTS
V3025	PCT OF TOT CONSTR FUNDS FROM PRIV GIFTS
V3030	CONSTR FUNDS-TOT OTHER
V3035	PCT OF TOT CONSTR FUNDS FROM OTHER

--BUILDING COSTS--

V3100	BLDG CONSTR COSTS-TOT
V3110	MOVABLE EQUIP CONSTR COSTS-TOT

--BUILDING USE--

V3200	CONSTR BLDG USE-PCT FOR TCH
V3210	CONSTR BLDG USE-PCT FOR RESRCH
V3220	CONSTR BLDG USE-PCT FOR MD SERV
V3230	CONSTR BLDG USE-PCT FOR OTHER
	*** GENERAL ***
V3300	PROFESSIONAL FEES RECVD PER CL SCI FAC
V3310	MC LIBRARIES-BUDGET,BOOKS,PERIODICALS,BINDING
V3320	MC EXPEN-SPONS RESRCH PER FT FAC
V3325	MC EXPEN-SPONS RESRCH PER MD STUDENT
V3330	MC EXPEN-SPONS TCH-TRN PER MD STUDENT
V3340	MC EXPEN-REG OP COSTS
V3345	MC EXPD-REG OP COSTS PER MD STUDENT
V3350	SPONS PROG EXPD PER FT FAC

ACADEMIC PROGRAM

*** GENERAL ***

V4000	OFFER COMBINED DOC+MD PROG 74-75
V4010	USE NATL BDS PT 1-PROMOTION TEST 74-75
V4020	USE NATL BDS PT 2-GRADUATION TEST 74-75
V4030	MINIMUM MONTHS INSTR FOR MD DEGREE
V4035	UNIT FOR RESRCH & DEV OF ED PROCESS
V4040	MC PERMITS PASS-FAIL GRADING
V4050	TYPE GRADING-HONORS,PASS,FAIL 74-75
V4060	HLTH PRACTITIONER PROG-PHYS ASST 73
V4070	HLTH PRACTITIONER PROG-NURSING 73
V4080	HLTH PRACTITIONER PROG-MEDEX 73
V4090	HLTH PRACTITIONER PROG-MIDWIFE NURSE 73

*** CURRICULUM ***

V4100	CURR INNOVATN-AMBUL PRIM CARE PROG 74-75
V4110	CURR INNOVATN-SPECLTY TRACKS 74-75
V4120	CURR INNOVATN-CL APPL COMPUTERS 74-75
V4130	CURR INNOVATN-COMPUTER ASSTD INSTR 74-75
V4140	CURR ELECTIVES-HUMAN SEXUALITY 74-75
V4150	CURR ELECTIVES-MD JURISPRUDENCE 74-75
V4160	CURR ELECTIVES-NUTRITION 74-75
V4170	CURR ELECTIVES-NON-WESTERN MEDICINE74-75
V4180	CURR ELECTIVES-POP DYNAMICS 74-75
V4190	CURR ELECTIVES-DRUG ABUSE 74-75
V4200	CURR ELECTIVES-ALCOHOLISM 74-75
V4210	CURR ELECTIVES-MD HYPNOSIS 74-75
V4220	CURR ELECTIVES-ETHICAL PROBLEMS 74-75
V4230	CURR ELECTIVES-HLTH CARE DELIVERY 74-75
V4240	CURR-FAMILY MD PROG 74-75

V4250	CURR-FAMILY MD GRAD PROG 73
V4260	CURR-PRIMARY CARE PROG 74-75
V4270	CURR-ACCELERTD PROG-MD DEGREE LESS THAN 6 YRS
V4280	CURR-RESRCH & DEV OF ED PROCESS 74-75
V4290	CURR-REQUIRED AMBUL CARE EXPERIENCE 73
V4300	CURR-PCT UNDERGRAD EXPERIENCE AMBUL CARE 73
V4310	CURR-PRIM CARE DEPT ENCOURAGE GENERALIST 73
V4320	CURR-TOT MD STUDENTS OPERATIONAL HMO 73
V4325	CURR-HLTH PRACTITIONER PROG 73
V4330	CURR-EMERGENCY CARE PROG 73
V4340	CURR-PATIENT CARE PROG-ALCOHOLISM OR DRUG ABUSE73
V4350	CURR-HLTH CARE MANGMT PROG 73
V4360	STATEMNT OF BEHAV OBJS PUBLSHD

FACULTY

*** STAFF ***

--TOTAL TEACHING STAFF--

V5000	FT FAC-TOT ALL DEPT 72-73
V5010	FT FAC-TOT ALL DEPT 73-74
V5020	RATIO-FT FAC TO MD STUDENTS
V5025	RATIO FT FAC TO TOTAL STUDENTS
V5030	RATIO PT FAC TO FT FAC
V5040	RATIO VOL FAC TO FT FAC

--TOTALS BY MAJOR DISCIPLINE--

V5100	BAS SCI-TOT FT FAC
V5110	BAS SCI-TOT PT FAC
V5120	BAS SCI-TOT VOL FAC
V5130	CL SCI-TOT FT FAC 72-73
V5140	CL SCI-TOT FT FAC 73-74
V5150	CL SCI-TOT PT FAC
V5160	CL SCI-TOT VOL FAC

--TOTALS BY RANK--

V5200	PROF-TOT FT-CLI SCI
V5205	PROF-PCT FT-CLI SCI
V5210	ASSOC PROF-TOT FT-CLI SCI
V5215	ASSOC PROF-PCT FT-CLI SCI
V5220	ASST PROF-TOT FT-CLI SCI
V5225	ASST PROF-PCT FT-CLI SCI
V5230	INSTR-TOT FT-CLI SCI
V5235	INSTR-PCT FT-CLI SCI
V5240	PROF-TOT FT-BAS SCI
V5245	PROF-PCT FT-BAS SCI
V5250	ASSOC PROF-TOT FT-BAS SCI
V5255	ASSOC PROF-PCT FT-BAS SCI

V5260 ASST PROF-TOT FT-BAS SCI
V5265 ASST PROF-PCT FT-BAS SCI
V5270 INSTR-TOT FT-BAS SCI
V5275 INSTR-PCT FT-BAS SCI

--VACANCIES--

V5300 VACANCIES-FT FAC-CL SCI
V5310 VACANCIES-FT FAC-BAS SCI
V5320 PCT BUDGETED VACANCIES-CL SCI

*** SALARY ***

--BASIC SCIENCE BY RANK--

V5400 AV TOT SALARY-PROF-BAS SCI 74-75
V5410 AV TOT SALARY-ASSOC PROF-BAS SCI 74-75
V5420 AV TOT SALARY-ASST PROF-BAS SCI 74-75
V5430 AV TOT SALARY-INSTR-BAS SCI 74-75

--CLINICAL SCIENCE BY RANK--

V5500 AV TOT SALARY-PROF-CL SCI 74-75
V5510 AV TOT SALARY-ASSOC PROF-CL SCI 74-75
V5520 AV TOT SALARY-ASST PROF-CL SCI 74-75
V5530 AV TOT SALARY-INSTR-CL SCI 74-75

--DEPARTMENT OF MEDICINE BY RANK--

V5540 AV TOT SALARY-PROF MD-CL SCI 74-75
V5550 AV TOT SALARY-ASSOC PROF MD-CL SCI 74-75
V5560 AV TOT SALARY-ASST PROF MD-CL SCI 74-75
V5570 AV TOT SALARY-INSTR MD-CL SCI 74-75

--ANESTHESIOLOGY BY RANK--

V5600 AV TOT SALARY-PROF-ANESTH 74-75
V5610 AV TOT SALARY-ASSOC PROF-ANESTH 74-75
V5620 AV TOT SALARY-ASST PROF-ANESTH 74-75
V5630 AV TOT SALARY-INSTR-ANESTH 74-75

STUDENT ADMISSIONS

*** ENROLLMENT ***

--STUDENT BODY TOTALS--

V6000 ENROLL-TOT STUDENTS
V6010 TOT STUDENTS...ALL...INSTRUCTED AT MC
V6020 ENROLL-TOT MD STUDENTS 73-74

V6025	ENROLL-TOT MD STUDENTS 72-73
V6030	ENROLL-ACTUAL GROWTH RATE
V6040	ENROLL-TOT MD STUDENT EQUIV INSTR BY MD
V6050	ENROLL RATIO-MD STUDENTS EQUIV TO MD STUDENTS
V6080	ENROLL RATIO-INTERNS & RESDNTS TO MD STUDENTS
V6090	ENROLL RATIO-INTERNS TO MD STUDENTS
V6100	ENROLL RATIO-RESDNTS TO MD STUDENTS
V6110	ENROLL-TOT FINAL YR STUDENTS-MAS & DOC CAND-BAS SCI
V6120	ENROLL-TOT FINAL YR STUDENTS-MAS & DOC CONFRD
V6130	ENROLL-TOT FINAL YR STUDENTS-NON-DEGREE CAND
V6140	ENROLL RATIO-MAS & DOC BAS SCI TO MD STUDENTS
V6160	ENROLL RATIO-MAS & DOC CONFRD TO TOT ENROLL

--IN STATE-OUT OF STATE STUDENTS--

V6200	ENROLL-TOT IN ST MD STUDENTS
V6210	ENROLL-TOT OUT ST MD STUDENTS
V6220	ENROLL RATIO-IN ST TO OUT ST MD STUDENTS
V6230	PCT MD STUDENT FROM HOME STATE

--STUDENTS PER FACULTY--

V6300	TOT RESDNTS INSTR BY MD FAC 72-73
V6310	TOT RESDNTS INSTR BY MD FAC 73-74
V6320	TOT INTERNS INSTR BY MD FAC 72-73
V6330	TOT INTERNS INSTR BY MD FAC 73-74

--PROJECTED ENROLLMENT--

V6400	PROJTD ENROLL-TOT FINAL YR MD STUDENTS 74-75
V6410	PROJTD ENROLL-TOT FINAL YR MD STUDENTS 75-76
V6420	PROJTD ENROLL-TOT FINAL YR MD STUDENTS 76-77
V6430	PROJTD ENROLL-PCT GROWTH MD STUDENTS 74-77
V6440	PROJTD ENROLL-TOT 1ST YR MD STUDENTS 74-75
V6450	PROJTD ENROLL-TOT 1ST YR MD STUDENTS 75-76
V6460	PROJTD ENROLL-TOT 1ST YR MD STUDENTS 76-77
V6470	PROJTD ENROLL-TOT 1ST YR MD STUDENTS 77-78
V6480	PROJTD ENROLL-TOT 1ST YR MD STUDENTS 78-79
V6490	PROJTD ENROLL-PCT GROWTH 1ST YR MD STUDENTS 74-79

--BY CLASS--

V6500	ENROLL-TOT 1ST YR MD STUDENTS
V6510	ENROLL-TOT MID YR MD STUDENTS
V6520	ENROLL-TOT FINAL YR MD STUDENTS

--BY SEX--

V6600	ENROLL-TOT MALE 1ST YR MD STUDENT
V6605	ENROLL-PCT FEMALE 1ST YR MD STUDENT
V6610	ENROLL-TOT MALE MID YR MD STUDENT
V6615	ENROLL-PCT FEMALE MID YR MD STUDENT

V6620	ENROLL-TOT MALE FINAL YR MD STUDENT
V6625	ENROLL-PCT FEMALE FINAL YR MD STUDENT
V6630	ENROLL-TOT MALE MD STUDENT
V6635	ENROLL-PCT FEMALE MD STUDENT

--FOREIGN MEDICAL STUDENTS--

V6700	FMS ENROLL-TOT MD STUDENTS
V6705	FMS ENROLL-PCT MD STUDENTS
V6710	FMS ENROLL-TOT 1ST YR MD STUDENTS
V6715	FMS ENROLL-PCT 1ST YR MD STUDENTS
V6720	FMS ENROLL-TOT MID YR MD STUDENTS
V6725	FMS ENROLL-PCT MID YR MD STUDENTS
V6730	FMS ENROLL-TOT GRAD MD STUDENTS
V6735	FMS ENROLL-PCT GRAD MD STUDENTS

--ETHNIC COMPOSITION--

V6800	MD STUDENTS-TOT UNDER REP MINORITY
V6805	MD STUDENTS-PCT UNDER REP MINORITY
V6810	MD STUDENTS-TOT CAUCASIAN MALE
V6820	MD STUDENTS-TOT CAUCASIAN FEMALE
V6830	MD STUDENTS-TOT ORIENTAL-AM MALE
V6840	MD STUDENTS-TOT ORIENTAL-AM FEMALE

--REPEATERS--

V6900	REPEATERS-PCT 1ST YR MD STUDENTS
V6910	REPEATERS-TOT 1ST YR MD STUDENTS MALE
V6920	REPEATERS-TOT 1ST YR MD STUDENTS FEMALE

--WITHDRAWALS--

V7000	WITHDRL-TOT MD STUDENTS-ALL REASONS
V7005	WITHDRL-PCT MD STUDENTS-ALL REASONS
V7010	WITHDRL-TOT 1ST YR-ALL REASONS
V7015	WITHDRL-PCT 1ST YR-ALL REASONS
V7020	WITHDRL-TOT MID YR-ALL REASONS
V7025	WITHDRL-PCT MID YR-ALL REASONS
V7030	WITHDRL-TOT FINAL YR-ALL REASONS
V7035	WITHDRL-PCT FINAL YR-ALL REASONS

*** ENTERING QUALIFICATIONS ***

--GPA--

V7100	UNDERGRAD GPA-ENTERING 1ST YR MD STUDENTS
V7110	PRE MD GPA 3.6 TO 4.0-1ST YR MD STUDENTS
V7115	PRE MD GPA 3.6 TO 4.0-PCT 1ST YR MD STUDENTS

V7120	PRE MD GPA 2.6 TO 3.5-1ST YR MD STUDENTS
V7125	PRE MD GPA 2.6 TO 3.5 PCT 1ST YR MD STUDENTS
V7130	PRE MD GPA LESS THAN 2.6-1ST YR MD STUDENTS
V7135	PRE MD GPA LESS THAN 2.6-PCT 1ST MD STUDENTS
V7140	PRE MD GPA UNKNOWN-1ST YR MD STUDENTS
V7145	PRE MD GPA UNKNOWN-PCT 1ST YR MD STUDENTS

--MCAT--

V7200	MEAN MCAT SCORE SCI-1ST YR MD STUDENTS
V7210	MEAN MCAT SCORE VER-1ST YR MD STUDENTS
V7220	MEAN MCAT SCORE GEN-1ST YR MD STUDENTS
V7230	MEAN MCAT SCORE QUAN-1ST MD STUDENTS

--DEGREE STATUS--

V7300	TOT BACH-1ST YR MD STUDENTS
V7305	PCT BACH-1ST YR MD STUDENTS
V7310	TOT MAS-1ST YR MD STUDENTS
V7315	PCT MAS-1ST YR MD STUDENTS
V7320	TOT DOC-1ST YR MD STUDENTS
V7325	PCT DOC-1ST YR MD STUDENTS
V7330	PCT ANY DEGREE-1ST YR MD STUDENTS
V7340	TOT OTHER DEGREE-1ST YR MD STUDENTS
V7345	PCT OTHER DEGREE-1ST YR MD STUDENTS
V7350	TOT NO DEGREE-1ST YR MD STUDENTS
V7355	PCT NO DEGREE-1ST YR MD STUDENTS

--UNDERGRADUATE EDUCATION--

V7400	UNDERGRAD ED-2 YRS OR LESS-1ST YR MD STUDENTS
V7405	UNDERGRAD ED-2 YRS OR LESS-PCT 1ST YR MD STUDENTS
V7410	UNDERGRAD ED-3 YRS-1ST YR MD STUDENTS
V7415	UNDERGRAD ED-3 YRS-PCT 1ST YR MD STUDENTS
V7420	UNDERGRAD ED-4 YRS OR MORE-1ST YR MD STUDENTS
V7425	UNDERGRAD ED-4 YRS OR MORE-PCT 1ST YR MD STUDENTS

*** STUDENT AID ***

--REQUESTING--

V7500	REQ AID-TOT MD STUDENTS
V7505	REQ+RECVD AID-PCT MD STUDENTS
V7510	REQ AID-TOT 1ST YR MD STUDENTS
V7515	REQ+RECVD AID-PCT 1ST YR MD STUDENTS
V7520	REQ AID-TOT 2ND YR MD STUDENTS
V7525	REQ+RECVD AID-PCT 2ND YR MD STUDENTS
V7530	REQ AID-TOT 3RD YR MD STUDENTS

V7535	REQ+RECVD AID-PCT 3RD YR MD STUDENTS
V7540	REQ AID-TOT FINAL YR MD STUDENTS
V7545	REQ+RECVD AID-PCT FINAL YR MD STUDENTS

--RECEIVING--

V7600	RECVD AID-TOT MD STUDENTS
V7610	TOT AID TO MD STUDENTS
V7615	AV AMT AID TO MD STUDENTS
V7620	RECVD AID-TOT 1ST YR MD STUDENTS
V7630	TOT AID TO 1ST YR MD STUDENTS
V7635	AV AMT AID TO 1ST YR MD STUDENTS
V7640	RECVD AID-TOT 2ND YR MD STUDENTS
V7650	TOT AID TO 2ND YR MD STUDENTS
V7655	AV AMT AID TO 2ND YR MD STUDENTS
V7660	RECVD AID-TOT 3RD YR MD STUDENTS
V7670	TOT AID TO 3RD YR MD STUDENTS
V7675	AV AMT AID TO 3RD YR MD STUDENTS
V7680	RECVD AID-TOT FINAL YR MD STUDENTS
V7690	TOT AID TO FINAL YR MD STUDENTS
V7695	AV AMT AID TO FINAL YR MD STUDENTS

--NEEDING--

V7700	NEED AID-TOT MD STUDENTS
V7705	NEED+RECVD AID-PCT OF TOT MD STUDENTS
V7710	NEED AID-TOT 1ST YR MD STUDENTS
V7715	NEED+RECVD AID-PCT 1ST YR MD STUDENTS
V7720	NEED AID-TOT 2ND YR MD STUDENTS
V7725	NEED+RECVD AID-PCT 2ND YR MD STUDENTS
V7730	NEED AID-TOT 3RD YR MD STUDENTS
V7735	NEED+RECVD AID-PCT 3RD YR MD STUDENTS
V7740	NEED AID-TOT FINAL YR MD STUDENTS
V7745	NEED+RECVD AID-PCT FINAL YR MD STUDENTS

--AID DISPERSED TO STUDENTS--

V7800	AID-AMT PER MD STUDENT
V7810	RECVD AID-LOANS-TOT MD STUDENTS
V7815	RECVD AID-LOANS-PCT MD STUDENTS
V7820	RECVD AID-SCHLSHIP-TOT MD STUDENTS
V7825	RECVD AID-SCHLSHIP-PCT MD STUDENTS

*** EXPENSES ***

--TUITION, EXPENSES, & FEES--

V7900	TUIT+EXPEN PER IN ST MD STUDENT
V7910	TUIT+EXPEN PER OUT ST MD STUDENT
V7920	FEES+EXPEN EXCLUD TUIT PER MD STUDENT
V7930	AV EXPEN PER IN ST MD STUDENT UNMARRIED
V7940	AV EXPEN PER OUT ST MD STUDENT UNMARRIED
V7950	TUIT+EXPEN RATIO-IN ST TO OUT ST

*** STUDENT SELECTION ***

--YEAR--

V8000	YR SELECTD-HS SR 73
V8010	YR SELECTD-UNDERGRAD FR 74-75
V8020	YR SELECTD-UNDERGRAD SOPH 74-75
V8030	YR SELECTD-UNDERGRAD JR 74-75
V8040	YR SELECTD-UNDERGRAD SR 74-75

--APPLICANTS--

V8100	APPL-TOT
V8110	APPL-TOT MALE
V8115	APPL-PCT MALE TO TOT
V8120	APPL-TOT FEMALE
V8130	RATIO-MALE APPL TO ENTERING
V8140	RATIO-FEMALE APPL TO ENTERING
V8150	RATIO-APPL TO ENTERING

--STANDING--

V8200	MC ACCEPT TRANS STUDENTS
V8210	MC ACCEPT ADV STANDING STUDENTS

*** CAREER REVIEW ***

V8300	HLTH MANPOWER REV CAREER CHOICE WITHIN 5 YRS OF GRAD 73
V8310	HLTH MANPOWER REV CAREER CHOICE 5 YRS AFTER GRAD 73
V8320	HLTH MANPOWER REV CAREER CHOICE APPL 73
V8330	ADVIS PROG-STUDENT RETENTION 74-75
V8340	CAREER INTENT AFFECTS ADMISS DECISION

ABBREVIATIONS

ACADM	ACADEMIC
ADMISS	ADMISSIONS
ADMN & GEN	ADMINISTRATIVE & GENERAL
ADV DEGREE	ADVANCED DEGREE
ADVIS PROG	ADVISORY PROGRAM
AFFIL	AFFILIATED
AM	AMERICAN
AMBUL	AMBULATORY
AMT	AMOUNT
ANESTH	ANESTHESIOLOGY
APPL	APPLICANT, APPLICATION
ASSOC PROF	ASSOCIATE PROFESSOR
ASSOC PROF MD	ASSOCIATE PROFESSOR OF MEDICINE
ASSTD	ASSISTED
AV	AVERAGE
BACH	BACHELORS DEGREE
BAS SCI	BASIC SCIENCE
BEHAV OBSS PUBLSHD	BEHAVIORAL OBJECTIVES PUBLISHED
BLDG	BUILDING
CL SCI	CLINICAL SCIENCE
CONSTR	CONSTRUCTION
CURR	CURRICULUM
DEPT	DEPARTMENT
DEV	DEVELOPMENT
DOC	DOCTORATE
DOC CAND	DOCTORAL CANDIDATE
DOC CONFRD	DOCTORALS CONFERRED
ED	EDUCATION
ENDOW	ENDOWMENTS
ENTERING	ENTERING STUDENTS
EQUIP	EQUIPMENT
EXPD	EXPENDITURES
FAC	FACULTY
FED	FEDERAL
FMS	FOREIGN MEDICAL STUDENTS
FT FAC	FULL-TIME FACULTY
GPA	GRADE POINT AVERAGE
GRAD	GRADUATION
GRTS	GRANTS

HLTH	HEALTH
HMO	HEALTH MAINTENANCE ORGANIZATIONS
HOSPS	HOSPITALS
HS SR	HIGH SCHOOL SENIOR
INDUS	INDUSTRY
INNOVATN	INNOVATION
INSTR	INSTRUCTOR, INSTRUCTED
INSTR & DEPT RESRCH	INSTRUCTION & DEPARTMENTAL RESEARCH
LOC	LOCAL
MANGMT	MANAGEMENT
MAS	MASTERS DEGREE
MC	MEDICAL COLLEGE
MCAT SCORE GEN	MCAT SCORE GENERAL KNOWLEDGE
MCAT SCORE SCI	MCAT SCORE SCIENCE
MCAT SCORE VER	MCAT SCORE VERBAL
MCAT SCORE QUAN	MCAT SCORE QUANTITATIVE
MD	MEDICAL
NATL BDS	NATIONAL BOARDS
NEED & RECVD AID	NEEDED & RECEIVED AID
NON-GOVT	NON-GOVERNMENT
PCT	PERCENT
PHYS ASST	PHYSICIAN'S ASSISTANT
POP	POPULATION
PRIM CARE	PRIMARY CARE
PRIV	PRIVATE
PROF	FULL PROFESSOR
PROF MD	PROFESSOR OF MEDICINE
PROG	PROGRAM
PROJ	PROJECT
PROJTD	PROJECTED
PT FAC	PART-TIME FACULTY
RECVD	RECEIVED
REG OP COSTS	REGULAR OPERATING COSTS
REQ AID	REQUESTED AID
REQ & RECVD AID	REQUESTED & RECEIVED AID
RESDNTS	RESIDENTS
RESRCH	RESEARCH
REV	REVENUES
REV CAREER	REVIEW CAREER

SCH	SCHOOL
SELECTD	SELECTED
SERV	SERVICE
SMSA	STANDARD METROPOLITAN STATISTICAL AREA
SPONS	SPONSORED
ST	STATE
STUDENT EQUIV	STUDENT EQUIVALENT
TCH-TRN	TEACHING-TRAINING
TOT	TOTAL
TRANS STUDENTS	TRANSFERRED STUDENTS
TUIT & EXPEN	TUITION & EXPENSES
UNIV	UNIVERSITY
UNRESTR	UNRESTRICTED
VOL	VOLUMES
VOL FAC	VOLUNTARY FACULTY
WITHDRL	WITHDRAWALS
YR	YEAR

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